

Requirement	Tab	Topic	Description	Note
9.i.	9.i.1	GST v TRC	Provide an analysis of the actual performance of each program, using both the GST and the TRCT, in live excel spreadsheets with all assumptions clearly stated, justified, and referenced. For reference, this request is analogous to updating table 10 of the Synapse Report with data delineated as requested.	Provided within the BC Model
	9.i.2	Discount rates	Provide an accounting of all of the discount rates used by the Utility, including but not limited to internal capital planning, FERC reporting, federal, state, and local tax, the weighted costs of capital, and energy cost forecasting for 2021 and 2022. For each rate reported, please justify why it is the appropriate measure for that specific instance.	
9.ii.	9.ii.1	Plan & Actual Savings	Provide an analysis of the planned and actualized energy efficiency savings, broken out by the program, savings category, and customer class	Provided within the BC Model
	9.ii.2	PI - 100% test	As part of this reporting, calculate the estimated annual performance incentive—as both a percentage and aggregate dollars—for each Utility based on the current formula and calculate the performance incentive—as both a percentage and aggregate dollars—if the minimum achievement level was changed from 65%-75% to 100% for each category as outlined in tables 5-1 and 5-2 of the proposed EE Plan (Bates pages 88–89).	Provided within the BC Model
9.iii.	9.iii.1	Expenses by State; Contractors	Please report the amount of funding expended on all Energy Efficiency contractors and consultants in 2021 and 2022. Please list the contractors' names, and business addresses, appropriately redacted. Summarize the expenditures by US state and foreign country	Also included in State roll-up view
	9.iii.2	Projects by Municipalities	For 2021 and 2022, report the amount of energy efficiency funding expended in each New Hampshire municipality. Please include the total spending over this period and the amount expended that cannot be tied back to a project in an NH municipality. Please include the number of projects funded in each NH municipality, number of ratepayers in each municipality, and dollars spent per municipality and per ratepayer in each municipality	
	9.iii.3	impact on NH Economy - long term impact	Please comprehensively conduct a study and report on the 2021 and 2022 Plan's long-term impact on the NH economy that quantifies all factors noted in the 2022– 2023 Plan at Bates pages 6 and 7 by properly accounting for discounting that reflects ratepayers' time-preference, and by estimating the energy savings to reflect both the energy intensity and the spillover impacts also associated with future incremental economic activity prompted by the Plan.	Separate Report
9.iv.	9.iv.1	Project Subsidy Level	1. For any energy efficiency project that a ratepayer avails, the column "Subsidy" represents the share of the total cost of the project that is paid for by the utility. Please provide the requested information for all customer projects for program year 2021 and 2022 per the table	Also included in State roll-up view
	9.iv.2	NPV of EE Services Provided at No Cost	Please provide an analysis of energy efficiency and net present value, for all services and equipment provided at no direct cost to the end customer. Separate into logical categories, including low income.	
9.v.	9.v	Market Barriers - quantification of cost	Please conduct an analysis quantifying, in terms of net present value, the market barriers listed in Tables 2.1 and 3.1 of the proposed EE Plan (Bates Pages 27, 28, 49, and 50)	Also supported with Separate Report
9.vi.	9.vi	Expenses/Revenues by Category	Please report on annual expenditures, on a program-by-program basis broken down by categories including, but not limited to, internal administrative costs, costs associated with external consultants, and costs paid to subsidiaries. Please provide these figures in single tables with annual funding, annual budget, and actual annual spending (including any carryforward funds expended). Provide this data beginning year 2016 up through 2021 in the first filing and through 2022 in the second filing.	Also included in State roll-up view
9.vii.	9.vii.1	HEA Project Incentive Level	1. Please report the number of projects which received rebate funding in 2021 and 2022 which fall into the following ranges and to whom the benefits directly accrue (low income ratepayer or landlord) (\$0-\$9k, \$9-\$12k, \$12-\$15k, > \$15k) - add a both for housing authority projects	
	9.vii.2	HEA Projects over \$15K	Please provide a brief narrative for each project that receives a rebate of over \$15,000. Do not structure program rebates to avoid this additional reporting requirement.	
9.viii.	9.viii	Other reporting	Please provide copies of all filings utilities made to regional or regulatory organizations regarding Energy Efficiency programs during 2021 and 2022. Examples include Forward Capacity Market (FCM), Regional Greenhouse Gas Initiative (RGGI), etc.	Reports are being provided concurrently as separate files.

Please refer to the NU 2022 Actual BC Model

**Discount Rate Summary**

	<b>2022</b>	<b>2021</b>	<b>Comment</b>
<b>Customer Contribution Model - Investments</b>			
NuNH	6.56%	6.79%	After Tax Weighted Cost of Capital
<b>Pension and PBOP</b>			
Plan costs	2.85%	2.50%	Evaluation of both current market conditions and Unitil's Benefit Plan cash flows. Approximately equal to high quality corporate and utility bond interest rate indices and pension yield curves. Per GAAP the
Plan assets	5.25%	2.85%	
<b>Operating Lease Obligation</b>	3.70%	3.90%	Weighted average operating lease rate (changes quarterly) based on the rate stated in each lease agreement
<b>Fair Value of Long-Term Debt</b>	4.28%	3.28%	Current debt rate of similar issues - Moody's Baa Utility Bond Average Yield (changes quarterly)

The Energy Efficiency real discount rate is calculated in accordance with the methodology outlined in the Avoided Energy Supply Components 2021 study (AESC 2021). The calculation is  $\text{Real Discount Rate} = \frac{(1 + \text{Nominal Discount Rate})}{(1 + \text{Inflation Rate})} - 1$ . AESC 2021 uses a Real Discount Rate of 0.81% based on default calculated values of 2.82% for the Nominal Discount Rate and 2.00% for the Inflation Rate. AESC 2021 also provides tools for users to insert their own input assumptions for these rates to calculate avoided costs. Following precedent established in previously approved filings, the Utilities use Nominal Discount Rates and Inflation Rates that are updated for the year in which measures will be installed, and were updated as of June 2021 for program years 2022 and 2023. The effect of using these rates resulted in a Real Discount Rate of 1.19%, a lower risk rate than the AESC 2021 default of 0.81%.

These are very low risk investments that are customer owned and operated and due to the nature of the investments, and confirmed by routine study of baselines and savings, are very reliable in terms of producing the expected reduction.

Please refer to the NU 2022 Actual BC Model

While the actual results have been modeled to show the impact of different thresholds retroactively applied, three things should be noted. First, the minimum thresholds need to be considered in conjunction with the targets established. Second, once the goals and thresholds are in place, the Utilities must actually perform and sufficiently deliver the results of the programs. Third, it should be noted that actually delivering programs in real time under different thresholds could incentivize behavior and outcomes that differ from what is portrayed.

Please refer to the NU 2022 Actual BC Model

-The Utilities have provided the information as requested, but would like to note that the data provided in and of itself does not fully reflect the impact of the programs at large. While the utilities have not collected this information, nor would it be administratively feasible to collect this information, it is important to consider the following when reviewing the table.

-The business address of a given contractor or vendor is not necessarily reflective of The location of The individual(s) who work with the NHSaves brand. For example, there are vendors with corporate addresses outside of New Hampshire whose employees the Utilities contract and work within New Hampshire.

-Contractor and vendor payments are not reflective of The full economic impact of The projects performed. The column labeled 'Rebate Portion of Total Amount' reflects the amounts that flowed through the contractors to customers in the form of cash rebates and/or the cost of procuring and installing energy efficiency measures on customer premises, which necessarily take place within New Hampshire and benefit utility customers.

-Additional Federal dollars were invested into the income-eligible projects completed.

**2022 Vendor Expenditures**

<b>Line</b>	<b>State/Country</b>	<b>Total Amount</b>	<b>Rebate Portion of Total Amount</b>
1	CA	\$36,991	\$17,196
2	CANADA	\$668	
3	CO	\$2,274	
4	MA	\$170,026	\$145,328
5	NH	\$853,598	\$625,798
6	NY	\$7,781	
7	PA	\$8,277	
8	TX	\$60,671	\$9,283
9	VT	\$4,714	
10	WA	\$13,020	
14	Grand Total	\$1,158,019	\$797,605



2022 List of Vendors

Line	Vendor Name	Street Address	City	State/Country	Zip Code
1			PITTSBURGH	PA	15250-7084
2			BOSTON	MA	02110
3			SUGAR LAND	TX	77479
4			BOULDER	CO	80302
5			SEATTLE	WA	989104
6			CONCORD	NH	03301
7			DALLAS	TX	75373
8			FORT WASHINGTON	PA	19034
9			RINDGE	NH	03461
10			SALISBURY	MA	01952
11			NEEDHAM	MA	02492
12			MANCHESTER	NH	03101
13			BEDFORD	NH	03110
14			BOSTON	MA	02284-5775
15			OAKLAND	CA	94612
16			TORONTO ONTARIO	CANADA	M5H 1K5
17			MANCHESTER	NH	03101
18			CONCORD	NH	03301
19			PITTSBURG	PA	15251-2058
20			AMESBURY	MA	01913
21			CONCORD	NH	03301
22			LOUDON	NH	03307
23			SOMERVILLE	MA	02144
24			DALLAS	TX	75320-3448
25			ITHACA	NY	14850
26			PORTSMOUTH	NH	03802-1105
27			PLYMOUTH	NH	03264
28			NASHUA	NH	03063
29			CONCORD	NH	03304-4855
30			HAVERHILL	MA	01835
31			BOSTON	MA	02284-5327
32			FALL RIVER	MA	02720
33			CONCORD	NH	03302
34			MANCHESTER	NH	03108
35			DOVER	NH	03821
36			MANCHESTER	NH	03102
37			PITTSBURGH	PA	15253-5904
38			MONTPELIER	VT	05602
39			ROCHESTER	NH	03837

Projects by Municipality - 2022

Municipality	Residential (including Low Income)				Commercial and Industrial				Total			
	Incentives	Participants	Customers	\$/Customer	Incentives	Participants	Customers	\$/Customer	Incentives	Participants	Customers	\$/Customer
Atkinson	\$ 325	2	368	\$ 0.88			42	\$ -	\$ 325	2	410	\$ 0.79
Dover	\$ 40,913	25	5,561	\$ 7.36	\$ 66,353.00	24	1,045	\$ 63.50	\$ 107,266	49	6,534	\$ 16.42
Durham	\$ 2,300	3	648	\$ 3.55	\$ 105,429.00	4	147	\$ 717.20	\$ 107,729	7	781	\$ 137.94
East Kingston			19	\$ -			2	\$ -	\$ -	-	21	\$ -
Epping			1	\$ -	\$ 8,300.00	1	12	\$ 691.67	\$ 8,300	1	8	\$ 1,037.50
Exeter	\$ 51,888	27	2,696	\$ 19.25	\$ 16,002.60	6	553	\$ 28.94	\$ 67,891	33	3,229	\$ 21.03
Greenland			106	\$ -			56	\$ -	\$ -	-	166	\$ -
Hampton	\$ 99,712	77	5,653	\$ 17.64	\$ 5,196.00	2	678	\$ 7.66	\$ 104,908	79	6,314	\$ 16.62
Hampton Falls			8	\$ -			2	\$ -	\$ -	-	10	\$ -
Kensington	\$ 6,345	2	79	\$ 80.32			4	\$ -	\$ 6,345	2	82	\$ 77.38
Newington			34	\$ -	\$ 301,500.00	1	210	\$ 1,435.71	\$ 301,500	1	251	\$ 1,201.20
North Hampton			37	\$ -	\$ 40,704.00	2	169	\$ 240.85	\$ 40,704	2	208	\$ 195.69
Plaistow	\$ 10,720	9	848	\$ 12.64	\$ 600.00	1	302	\$ 1.99	\$ 11,320	10	1,161	\$ 9.75
Portsmouth	\$ 366,755	35	5,702	\$ 64.32	\$ 49,558.18	9	1,683	\$ 29.45	\$ 416,313	44	7,336	\$ 56.75
Rochester	\$ 39,424	16	3,135	\$ 12.58	\$ 139,156.00	3	620	\$ 224.45	\$ 178,580	19	3,722	\$ 47.98
Rollinsford			20	\$ -			4	\$ -	\$ -	-	22	\$ -
Salem	\$ 25,729	9	1,280	\$ 20.10	\$ 90,041.00	5	683	\$ 131.83	\$ 115,770	14	1,942	\$ 59.61
Seabrook	\$ 44,541	21	1,767	\$ 25.21			369	\$ -	\$ 44,541	21	2,126	\$ 20.95
Somersworth	\$ 265,921	18	1,092	\$ 243.52	\$ 140,724.40	4	425	\$ 331.12	\$ 406,646	22	1,465	\$ 277.57
Stratham	\$ -	-	1	\$ -	\$ 40,714.00	2	75	\$ 542.85	\$ 40,714	2	76	\$ 535.71
rebate services total	\$ 204,390			\$ -	\$ 104,364.43			\$ -	\$ 308,754			

Projects by Subsidy Level - 2022

	<b>Subsidy %</b>	<b>Projects</b>	<b>Total Project Cost</b>	<b>Total Incentive</b>
All Programs	100%	47	\$ 213,953	\$ 213,953
	80-99%	24	\$ 419,179	\$ 394,410
	60-79%	38	\$ 1,120,778	\$ 756,974
	40-59%	68	\$ 592,709	\$ 286,262
	20-39%	24	\$ 491,842	\$ 138,353
	1-19%	108	\$ 1,723,660	\$ 168,898

NPV of EE Services Provided at No Cost

Program	Subsidy %	Projects	Total Project Cost	Total Incentive	Avg/Proj	Analysis for 100% Incentive
HEA	100%	10	\$ 145,043	\$ 145,043	\$ 14,504	HEA projects are done at no cost to the customer.
HPwES	100%	12	\$ 9,283	\$ 9,283	\$ 774	The projects at 100% subsidy are 'baseload' or Visual Audit projects where non-weatherization measure such as LED light bulbs, Wi-Fi thermostats, faucet aerators, and low-flow showerheads are directly installed at no cost to the customer.
Small C&I	100%	20	\$ 51,181	\$ 51,181	\$ 2,559	The projects at 100% subsidy are those where the incentive provided is equal to the estimated incremental cost of upgrading from the standard efficiency appliance to the energy efficient model or small non-weatherization costs for municipal customers.

### Explanation of Market Barriers

The attached worksheet includes a reproduction of the market barriers tables by sector (C&I and Residential, inclusive of income eligible customers) from the 2022-2023 Plan, as well as the planned interventions and program objectives. To this list, each of the utilities has included a column detailing the cost of the intervention for program year 2021, where such delineation is possible. A description of the source (e.g., the benefit cost ("BC") model for 2021 reporting, or the Q4 2021 report) is included in a separate column.

The budgeting of expenditures related to the energy efficiency programs has not been explicitly tied to overcoming specific market barriers, nor are the general ledger accounts used by the utilities designed to track these costs. Therefore, granular estimates of either planned or actual costs to overcome the specific market barriers identified in planning are, in most cases, not quantifiable. The energy efficiency programs budgets and expenditures have been organized across six budget categories, described in Table 1-13 on Bates 23 of the 2022-2023 Plan. The six cost categories have served as the basis of planning and reporting of expenses related to the regulated New Hampshire energy efficiency programs since 2002.

They are as follows:

- a) Internal Administration
- b) External Administration
- c) Customer Rebates and Services
- d) Internal Implementation Services
- e) Marketing
- f) Evaluation

The method of accounting for expenditures for the NH Energy Efficiency programs has been audited annually by the previous Public Utility Commission Audit Staff and now the Department of Energy Audit Staff. Also, the organization of expenditures, by cost category and program, is displayed most clearly in the Cost Table worksheet of each Company's B/C model, as well as in Attachment C the plan filed with and approved by the Commission. Because program year 2021 budgets were based on program year 2020 (see PUC Order 26,440 in Docket 17-136), the breakdown of planned costs by program and budget activity for 2021 is most closely associated with the 2020 Update Plan, Attachment C.

Not all energy efficiency program expenditures relate to identified market barriers or program interventions. Costs related to other activities include the following:

#### EM&V Costs

While the Market Barriers listed in the 2022-2023 Plan do not explicitly include activities related to Evaluation, Measurement and Verification, ("EM&V"), expenditures related to the Evaluation cost category are essential to the effective operation and continual improvement of program design and delivery. By reviewing how savings are calculated, how customers are using efficient equipment, and otherwise verifying that savings claims based on the best available information, independent third party evaluation ensures that reporting to the Commission is accurate and that offerings continue to be cost-effective. Evaluation activities also lead to continual evolution and improvements to the design and delivery of programs and help to ensure that customers are well served. Evaluation also supports the participation of utility staff in the EM&V Working Group as well as the cost of retaining a team of expert EM&V advisors whose services are competitively procured by the DOE. Finally, the evaluation cost category reflects expenditures associated with setting up and maintaining each utility's tracking systems as well as internal and external personnel engaged in data tracking activities.

#### Internal and External Admin Costs

While the Market Barriers listed in the 2022-2023 Plan do not explicitly include activities related to internal and external administration of programs, expenditures related to that cost category provide essential management oversight and administration of programs required to effectively comply with evolving regulatory requirements of the NHTSaves programs. Docket administration, report preparation, meetings with stakeholder groups such as the Energy Efficiency and Sustainable Energy ("EESSE") Board, development of new plans, budgets, bill impacts, lost base revenue calculations, benefit cost modeling, presentations, and more are covered under this budget category. These expenditures are essential to the administration of programs and ensure that program activity is fully transparent to the Commission, DOE and other stakeholders, and that the programs are responsive to the evolving policy and regulatory environment in New Hampshire.

Line	C&I Market Barrier	Program Interventions	Program Objectives	Cost of Intervention \$2022	Description of the cost / source
1	Incremental price difference between standard and high-efficiency goods and services.	1. Provide rebates to give effective price signals to help cover incremental first cost.	Customers consider operating costs and not just price tag when making purchase/investment decisions.	\$856,400	Total cost of rebates and services, not including those included elsewhere in this table
2		2. Offer low-interest or interest-free loans to allow customers to finance their portion of energy efficiency investment.		\$0	
3		3. Provide information about alternative sources of funding for their high-efficiency investments (state and federal rebates or tax credits).			
4		4. Provide information/training/proformas about the importance of looking at life-cycle costs on website and in communication.			
5	Lack of customer awareness related to: <ul style="list-style-type: none"> <li>benefits of energy efficiency</li> <li>existence of high-efficiency alternatives</li> <li>where to purchase high-efficiency equipment/quality installation</li> <li>how and when to reduce demand during system peaks.</li> </ul>	1. Promote energy-efficient options in store/online/at point of purchase.	Customers learn to look for and demand high-efficiency options. Market sales of high-efficiency equipment and services increases.	\$72,344	Total cost of marketing and internal implementation services from the Cost Tab of the B/C model
6		2. Keep information on NHSaves website up to date.			
7		3. Engage and train contractor network to improve understanding of/familiarity with new, high-efficiency technologies.			
8		4. Provide information to target customer audience through case studies, one-on-one contact, technical assistance, and building assessments.			
9		5. Co-market with contractors and retailers.			
10		6. Refer customers to Program Administrator vetted turnkey service providers.			
11	Midstream (retailers/ distributors) fail to stock high-efficiency products. <ul style="list-style-type: none"> <li>Lower turnover</li> <li>stocking cost</li> <li>lack of awareness / experience</li> </ul>	1. Include retailer training and recruitment in midstream program offering.	Greater availability/visibility of high-efficiency equipment at point of sale. Engaged and motivated retailers committed and rewarded for selling high-efficiency products. Market share of high-efficiency equipment and services increases.	\$17,496	total cost of rebates associated with midstream measures in the input tab of the BC model (not included in the total rebates in line 1)
12		2. Communicate attributes of emerging or improving high-efficiency equipment stock.			
13		3. Provide proper price signals to retailers who stock/sell targeted equipment.			
14		4. Co-market available incentives to customers.			
15	Building trades lack sufficient cadre of trained personnel, awareness, experience, or commitment to high-efficiency practices, both for existing building renovations and new construction.	1. No-cost training in best practices provided to builders and trade allies.	Build confidence and competence in high-efficiency building practices.  Improve the industry standard practice in building design.  Reward and celebrate builders and other professionals who demonstrate commitment to high-efficiency building design.  Capture opportunity at time of building/renovation for energy savings over the life of building.  Increase the industry standard practice for high-efficiency design/build/renovation.	\$10,051	total cost of education including marketing
16		2. Incentives provided for exceeding commercial building energy efficiency code and appliance standards.			
17		3. Case studies developed and promoted to highlight exceptional builders and homes.			
18		4. Collaboration with professional associations to promote the program and the benefits of high-efficiency homes.			
19				\$218,122	sum of rebates for new equipment and construction in the C&I sector (excluded from the rebates listed in line 1)

Total Cost	\$1,174,413
Total NPV Costs C&I Sector 2022	\$1,297,554
<b>Remaining</b>	<b>\$123,141</b>

EM&V	\$35,458
Internal Admin	\$86,407
External Admin	\$1,276
<b>Total</b>	<b>\$123,141</b>

Line	Resi Market Barrier	Program Interventions	Program Objectives	Cost of Intervention \$2022	Description of the cost / source
1 2 3 4 5	Incremental price difference between standard and high-efficiency goods and services.	<ol style="list-style-type: none"> <li>1. Provide rebates to give effective price signals to help cover incremental first cost.</li> <li>2. Offer low-interest or interest-free loans to allow customers to finance their portion of larger investments in weatherization and heating systems.</li> <li>3. Provide customers information about alternative sources of funding for their high-efficiency investments (state and federal rebates or tax credits).</li> <li>4. Provide information/training about the importance of looking at life-cycle costs on website and in communication.</li> </ol>	<p>Customers consider operating costs and not just price tag when making purchase/investment decisions.</p> <p>Market penetration of high-efficiency equipment and services increases, allowing the transition to market-based measure offering.</p>	<p>\$972,616</p> <p>\$8,300</p> <p>\$0</p>	<p>Total Rebates / Services from Cost Table for Residential and Income Eligible programs, minus behavior offers (which are listed below)</p> <p>On bill financing loans, which are not reflected in the cost table of the B/C model as this is a revolving loan fund with no new funding for 2022</p> <p>cost of interest buy down third party originated loans for gas customers</p>
6 7 8 9 10 11 12 13	<p>Lack of customer awareness related to:</p> <ul style="list-style-type: none"> <li>• benefits of energy efficiency</li> <li>• existence of high-efficiency alternatives.</li> <li>• where to purchase high-efficiency equipment</li> <li>• how and when to reduce demand during system peaks.</li> </ul>	<ol style="list-style-type: none"> <li>1. Promote energy-efficient options in store/online/at point of purchase.</li> <li>2. Use NH Saves/EnergyStar product labeling at point of purchase.</li> <li>3. Keep information on NHSaves website up to date.</li> <li>4. Provide customers access to pre-vetted online marketplace for energy efficiency goods and services.</li> <li>5. Send Home Energy Reports directly to customers through mail and email.</li> <li>6. Provide information to target audience at trade and home shows.</li> <li>7. Co-market with contractors and retailers.</li> <li>8. Directly control thermostat settings to reduce air conditioning use during system peaks.</li> </ol>	<p>Customers learn to look for and demand high-efficiency options.</p> <p>Market sales of high-efficiency equipment and services increases.</p>	<p>\$99,114</p> <p>\$29,747</p>	<p>total cost of marketing (internal and external) for Residential and Income Eligible programs, as well as implementation services (internal)</p> <p>rebates and services for behavior program (subtracted from line 1 rebate total)</p>
18 19 20 21	Building trades lack sufficient cadre of trained personnel, awareness, experience, or commitment to high-efficiency practices.	<ol style="list-style-type: none"> <li>1. No-cost training in best practices provided to builders and trade allies.</li> <li>2. Incentives provided for meeting Energy Star Homes standards and for other above-energy code practices.</li> <li>3. Case studies developed and promoted to highlight exceptional builders and homes.</li> <li>4. Collaboration with professional associations to promote the program and the benefits of high-efficiency homes.</li> </ol>	<p>Build competence and confidence in high-efficiency building practices</p> <p>Improve the industry standard practice in building design</p> <p>Reward and celebrate builders and other professionals who demonstrate commitment to high-efficiency building design</p> <p>Capture opportunity at time of building/renovation for energy savings over the life of a building or home</p>	<p>\$147,236</p>	<p>cost of rebates in Energy Star Homes program, subtracted from line 1</p>

Total Cost	\$1,248,713
Total NPV Costs C&I Sector 2022	\$1,393,356
<b>Remaining</b>	<b>\$144,643</b>

EM&V	\$39,061
Internal Admin	\$104,232
External Admin	\$1,350
<b>Total</b>	<b>\$144,643</b>

Tracking Activity	Description
<b>Administration—Internal</b>	Internal utility costs associated with program design, development, regulatory support, and quality assurance. Costs include employee labor, benefits, expenses, materials, and supplies.
<b>Administration—External</b>	External costs associated with program administration. This includes contractors and consultants used in support of program design, development, regulatory support, and quality assurance.
<b>Customer Rebates and Services</b>	Costs associated with incentives that reduce the cost of equipment as well as costs for services to speed adoption. This includes direct rebate dollars paid to distinct participants, as well as indirect incentives for equipment discounts. It also includes services such as technical audits, employee and contractor labor to install measures, expenses, materials, and supplies.
<b>Internal Implementation Services</b>	Tracking of internal utility costs associated with delivering programs to customers, including labor, benefits, expenses, materials, and supplies.
<b>Marketing</b>	Costs for marketing, advertising, trade shows, toll-free numbers, and NHSaves website. Types of expenses include labor, benefits, consultants, contractors, expenses, materials, and supplies.
<b>Evaluation</b>	Costs for EM&V activities including labor, benefits, expenses, materials, supplies, consultants, contractors, and tracking systems.



“Internal administrative costs” are reflected in the Cost Table of the Benefit Cost model and reflect internal employee time associated with the administration of the programs. These are distinct from internal implementation costs and, for Eversource and Unitil, also distinct from internal costs associated with marketing and evaluation activities. Report 6, Page 1 shows the plan and actual internal administrative costs by program in program years 2016 through 2022 in the column labeled “Internal Admin Costs”.

For the purposes of this reporting, costs associated with “External Consultants” has been defined as those associated with third party entities that are not directly engaged with the evaluation, marketing or implementation of energy efficiency programs (including education or pilots), but which are retained by the utilities either individually or collectively to support regulatory requirements, planning, or as paid to other parties such as the PUC or OCA as directed by Settlement or PUC Order. Due to the nature of the consulting work, these costs are not directly assigned to individual programs but are allocated among them. For some consultants, the expenses were not specifically budgeted for during planning, which is reflected by \$0 in the relevant fields. These costs are contained in Report 6, Page 1 under the column labeled “External Admin Costs”.

All of the Company’s expenses related to energy efficiency originate in Unitil Service Company (“USC”) and are reimbursed by Northern Utilities, Inc (NU).

Regarding Revenues, the Company develops its customer sector budgets based on anticipated revenues and carryforward (or ending balance) from the prior year. These anticipated revenues are comprised of:

- a. SBC revenues, equal to the approved rate x sales forecast by sector (electric programs only)
- b. FCM revenues, based on an estimate of capacity obligation in the relevant program year and the closing \$ / kW for the relevant commitment period (electric programs only)
- c. RGGI revenues, based on an estimate of revenues resulting from the state’s participation as provided by the PUC and subsequently DOE on an annual basis, allocated among the electric utilities based on sales forecasts [Budget? Customer counts?] and to the Municipal and Income Eligible programs based on legislative requirements. (electric programs only)
- d. LDAC revenues, equal to the approved rate(s) x sales forecast by sector (gas programs only)
- e. Interest based on the approved rate and the estimated monthly balance
- f. Contributions to the Income Eligible sector from the C&I and Residential sector revenues

The planned and actual revenues by sector are reflected for program years 2016 – 2022 in Report 9.vi Revenue by Category.



Actual	2022	Northern Utilities	Total Portfolio	Total	\$ 190,638	\$ 2,626	\$ 2,246,681	\$ 141,038	\$ 35,407	\$ 74,519	\$ 151,647	\$ 2,842,556
Plan	2022	Northern Utilities	A - Residential	A1-Residential Energy Star Homes	\$ 15,764	\$ 1,089	\$ 286,279	\$ 19,696	\$ 3,936	\$ 11,808	\$	\$ 298,548
Plan	2022	Northern Utilities	A - Residential	A2-Residential Home Prof'n Energy Star	\$ 17,753	\$ 1,224	\$ 291,386	\$ 14,546	\$ 4,439	\$ 12,316	\$	\$ 312,866
Plan	2022	Northern Utilities	A - Residential	A3-Residential Energy Star Appl	\$ 8,931	\$ 614	\$ 128,834	\$ 13,373	\$ 6,117	\$ 6,699	\$	\$ 164,571
Plan	2022	Northern Utilities	A - Residential	A5-Residential Behavior	\$ 2,121	\$ 146	\$ 34,010	\$ 2,562	\$ 265	\$ 1,990	\$	\$ 40,694
Plan	2022	Northern Utilities	B - Low-Income	B1-Low-Income Home Energy Assistance	\$ 34,451	\$ 2,000	\$ 415,075	\$ 89,318	\$ 4,304	\$ 19,876	\$	\$ 564,828
Plan	2022	Northern Utilities	C - Commercial & Industrial	C1-C&I Bz Business Services	\$ 35,361	\$ 1,500	\$ 668,893	\$ 38,581	\$ 10,420	\$ 26,520	\$	\$ 681,275
Plan	2022	Northern Utilities	C - Commercial & Industrial	C2-C&I Sm Business Services	\$ 35,042	\$ 1,500	\$ 961,697	\$ 38,472	\$ 12,880	\$ 26,281	\$	\$ 676,372
Plan	2022	Northern Utilities	C - Commercial & Industrial	C7-C&I Statewide Education	\$	\$	\$ 9,561	\$ 5,100	\$ 1,036	\$	\$	\$ 15,896
Plan	2022	Northern Utilities	Total Portfolio	Performance Incentive						\$	\$ 153,136	\$ 153,136
Plan	2022	Northern Utilities	Total Portfolio	Total	\$ 141,390	\$ 8,071	\$ 2,246,335	\$ 221,348	\$ 42,897	\$ 106,041	\$ 153,136	\$ 2,919,216

Revenue by Category

Plan/Actual	Year	Utility	Sector	Category	Amount
Actual	2016	NU-NH Gas	A-Res	EEC Revenue	\$ 499,557
Actual	2016	NU-NH Gas	A-Res	Interest	\$ (3,348)
Actual	2016	NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$ (90,233)
Actual	2017	NU-NH Gas	A-Res	EEC Revenue	\$ 616,030
Actual	2017	NU-NH Gas	A-Res	Interest	\$ 1,012
Actual	2017	NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$ 81,574
Actual	2018	NU-NH Gas	A-Res	EEC Revenue	\$ 889,719
Actual	2018	NU-NH Gas	A-Res	Interest	\$ (782)
Actual	2018	NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$ 77,804
Actual	2019	NU-NH Gas	A-Res	EEC Revenue	\$ 978,012
Actual	2019	NU-NH Gas	A-Res	Interest	\$ 3,263
Actual	2019	NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$ 105,968
Actual	2020	NU-NH Gas	A-Res	EEC Revenue	\$ 977,734
Actual	2020	NU-NH Gas	A-Res	Interest	\$ 9,787
Actual	2020	NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$ 68,152
Actual	2021	NU-NH Gas	A-Res	EEC Revenue	\$ 1,303,461
Actual	2021	NU-NH Gas	A-Res	Interest	\$ (90)
Actual	2021	NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$ 232,675
Actual	2016	NU-NH Gas	B-LowInc	EEC Revenue	\$ -
Actual	2016	NU-NH Gas	B-LowInc	Interest	\$ -
Actual	2016	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$ -
Actual	2017	NU-NH Gas	B-LowInc	EEC Revenue	\$ -
Actual	2017	NU-NH Gas	B-LowInc	Interest	\$ -
Actual	2017	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$ -
Actual	2018	NU-NH Gas	B-LowInc	EEC Revenue	\$ -
Actual	2018	NU-NH Gas	B-LowInc	Interest	\$ -
Actual	2018	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$ -
Actual	2019	NU-NH Gas	B-LowInc	EEC Revenue	\$ -
Actual	2019	NU-NH Gas	B-LowInc	Interest	\$ -
Actual	2019	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$ -
Actual	2020	NU-NH Gas	B-LowInc	EEC Revenue	\$ -
Actual	2020	NU-NH Gas	B-LowInc	Interest	\$ -
Actual	2020	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$ -
Actual	2021	NU-NH Gas	B-LowInc	EEC Revenue	\$ -
Actual	2021	NU-NH Gas	B-LowInc	Interest	\$ -
Actual	2021	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$ -
Actual	2016	NU-NH Gas	C-C&I	EEC Revenue	\$ 730,673
Actual	2016	NU-NH Gas	C-C&I	Interest	\$ (10,052)
Actual	2016	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$ (86,082)
Actual	2017	NU-NH Gas	C-C&I	EEC Revenue	\$ 762,382

Actual	2017 NU-NH Gas	C-C&I	Interest	\$	(8,332)
Actual	2017 NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	(43,303)
Actual	2018 NU-NH Gas	C-C&I	EEC Revenue	\$	1,108,683
Actual	2018 NU-NH Gas	C-C&I	Interest	\$	(9,543)
Actual	2018 NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	21,476
Actual	2019 NU-NH Gas	C-C&I	EEC Revenue	\$	1,463,452
Actual	2019 NU-NH Gas	C-C&I	Interest	\$	(28,145)
Actual	2019 NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	(38,884)
Actual	2020 NU-NH Gas	C-C&I	EEC Revenue	\$	1,345,140
Actual	2020 NU-NH Gas	C-C&I	Interest	\$	(641)
Actual	2020 NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	(192,621)
Actual	2021 NU-NH Gas	C-C&I	EEC Revenue	\$	1,697,817
Actual	2021 NU-NH Gas	C-C&I	Interest	\$	(16,352)
Actual	2021 NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	84,659
Planned	2016 NU-NH Gas	A-Res	EEC Revenue	\$	551,073
Planned	2016 NU-NH Gas	A-Res	Interest	\$	(2,999)
Planned	2016 NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$	(56,608)
Planned	2017 NU-NH Gas	A-Res	EEC Revenue	\$	604,200
Planned	2017 NU-NH Gas	A-Res	Interest	\$	(2,778)
Planned	2017 NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$	79,142
Planned	2018 NU-NH Gas	A-Res	EEC Revenue	\$	854,499
Planned	2018 NU-NH Gas	A-Res	Interest	\$	(7,486)
Planned	2018 NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$	37,771
Planned	2019 NU-NH Gas	A-Res	EEC Revenue	\$	986,380
Planned	2019 NU-NH Gas	A-Res	Interest	\$	(8,777)
Planned	2019 NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$	86,887
Planned	2020 NU-NH Gas	A-Res	EEC Revenue	\$	1,027,805
Planned	2020 NU-NH Gas	A-Res	Interest	\$	(9,147)
Planned	2020 NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$	48,042
Planned	2021 NU-NH Gas	A-Res	EEC Revenue	\$	1,558,312
Planned	2021 NU-NH Gas	A-Res	Interest	\$	(13,868)
Planned	2021 NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$	72,114
Planned	2016 NU-NH Gas	B-LowInc	EEC Revenue	\$	-
Planned	2016 NU-NH Gas	B-LowInc	Interest	\$	-
Planned	2016 NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$	-
Planned	2017 NU-NH Gas	B-LowInc	EEC Revenue	\$	-
Planned	2017 NU-NH Gas	B-LowInc	Interest	\$	-
Planned	2017 NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$	-
Planned	2018 NU-NH Gas	B-LowInc	EEC Revenue	\$	-
Planned	2018 NU-NH Gas	B-LowInc	Interest	\$	-
Planned	2018 NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$	-
Planned	2019 NU-NH Gas	B-LowInc	EEC Revenue	\$	-
Planned	2019 NU-NH Gas	B-LowInc	Interest	\$	-
Planned	2019 NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$	-
Planned	2020 NU-NH Gas	B-LowInc	EEC Revenue	\$	-
Planned	2020 NU-NH Gas	B-LowInc	Interest	\$	-
Planned	2020 NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$	-

Planned	2021	NU-NH Gas	B-LowInc	EEC Revenue	\$	-
Planned	2021	NU-NH Gas	B-LowInc	Interest	\$	-
Planned	2021	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$	-
Planned	2016	NU-NH Gas	C-C&I	EEC Revenue	\$	791,654
Planned	2016	NU-NH Gas	C-C&I	Interest	\$	2,928
Planned	2016	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	(69,061)
Planned	2017	NU-NH Gas	C-C&I	EEC Revenue	\$	771,700
Planned	2017	NU-NH Gas	C-C&I	Interest	\$	(3,945)
Planned	2017	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	(20,576)
Planned	2018	NU-NH Gas	C-C&I	EEC Revenue	\$	1,048,045
Planned	2018	NU-NH Gas	C-C&I	Interest	\$	(8,929)
Planned	2018	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	94,229
Planned	2019	NU-NH Gas	C-C&I	EEC Revenue	\$	1,460,100
Planned	2019	NU-NH Gas	C-C&I	Interest	\$	(17,133)
Planned	2019	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	85,932
Planned	2020	NU-NH Gas	C-C&I	EEC Revenue	\$	1,354,541
Planned	2020	NU-NH Gas	C-C&I	Interest	\$	(14,032)
Planned	2020	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	(73,779)
Planned	2021	NU-NH Gas	C-C&I	EEC Revenue	\$	1,704,516
Planned	2021	NU-NH Gas	C-C&I	Interest	\$	(17,657)
Planned	2021	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	157,004
Actual	2022	NU-NH Gas	A-Res	EEC Revenue	\$	876,710
Actual	2022	NU-NH Gas	A-Res	Interest	\$	(6,862)
Actual	2022	NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$	47,659
Actual	2022	NU-NH Gas	B-LowInc	EEC Revenue	\$	-
Actual	2022	NU-NH Gas	B-LowInc	Interest	\$	-
Actual	2022	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$	-
Actual	2022	NU-NH Gas	C-C&I	EEC Revenue	\$	1,449,207
Actual	2022	NU-NH Gas	C-C&I	Interest	\$	(29,956)
Actual	2022	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	451,895
Planned	2022	NU-NH Gas	A-Res	EEC Revenue	\$	1,011,432
Planned	2022	NU-NH Gas	A-Res	Interest		
Planned	2022	NU-NH Gas	A-Res	Carryforward Over/(Under) Recovery	\$	7,889
Planned	2022	NU-NH Gas	B-LowInc	EEC Revenue	\$	-
Planned	2022	NU-NH Gas	B-LowInc	Interest	\$	-
Planned	2022	NU-NH Gas	B-LowInc	Carryforward Over/(Under) Recovery	\$	-
Planned	2022	NU-NH Gas	C-C&I	EEC Revenue	\$	1,570,882
Planned	2022	NU-NH Gas	C-C&I	Interest		
Planned	2022	NU-NH Gas	C-C&I	Carryforward Over/(Under) Recovery	\$	325,069

HEA Projects, By Incentive Level - 2022

	<b>Total Projects</b>	<b>Owner Occupied Home</b>	<b>Renter Occupied Home</b>	<b># projects benefiting both (Housing Authority Proj)</b>
\$0-\$9,000	82	4	78	72
\$9,001 - \$12,000	1	1		
\$12,001 - \$15,000	11	1	10	10
\$15,001 +	1	1		

It is assumed by the Utilities that 100% of the benefits from these projects flow to the occupant of the home.

**HEA Projects, Incentive Above \$15,000 - 2022**

<b>Project #</b>	<b>Rebate Amount</b>	<b>Heating System</b>	<b>Tenant</b>	<b>Home Type</b>	<b>Reasons for higher project costs</b>
1	\$ 18,504.29	Y	N	SF	Heating System replacement



**Other Reports to File:**

N/A